

Exhibit 1

Derek A. King, M.S., P.E.
08/19/2024

Page 1

1 UNITED STATES DISTRICT COURT
2 IN AND FOR THE DISTRICT OF WYOMING

3 STEPHANIE WADSWORTH,)
individually and as)
4 Parent and Legal) CASE NO.
Guardian of W.W., K.W.,) 2:23-cv-00118-NDF
5 G.W., and L.W., minor)
children, and MATTHEW)
6 WADSWORTH,)
)
7 Plaintiffs,)
)
8 v.)
)
9 WALMART, INC. and JETSON)
ELECTRIC BIKES, LLC,)
10)
Defendants.)
11
12

13 ORAL DEPOSITION OF
14 DEREK A. KING, M.S., P.E.
15 MONDAY, AUGUST 19, 2024
16
17
18
19
20
21

22 REPORTED BY:

23 DEBRA A. DIBBLE, FAPR, RDR, CRR, CRC, Notary Public

24 California CSR 14345

25 JOB NO. 44990

Derek A. King, M.S., P.E.
08/19/2024

Page 15

1 So for BEAR as a whole, in their work
2 with Morgan & Morgan, it's been somewhere in the
3 neighborhood of 24-plus cases?

4 A. Yes.

5 Q. And then how about for you individually?

6 A. A few. Maybe five.

7 Q. For any of the other five or so cases
8 that you have personally worked on with Morgan &
9 Morgan, have any of them involved an allegation of a
10 product failure that involved a fire?

11 A. I don't believe so.

12 Q. How many cases have you handled in your
13 career that involved an allegation of a product
14 failure that resulted in a fire?

15 A. So I've been involved through working
16 with the other engineers in, I would say, dozens of
17 fire-related cases.

18 Q. How many in which you are the named
19 expert from BEAR on a case involving a fire claim?

20 A. Approximately three to five.

21 Q. And what were the products involved in
22 those cases?

23 A. One was a -- possibly a refrigerator and
24 related wiring. Another was -- actually, another
25 refrigerator. Another was batteries in a boat.

Derek A. King, M.S., P.E.
08/19/2024

Page 17

1 started at BEAR back in 2009, correct?

2 A. Yes.

3 Q. You have your education listed, BS from
4 UC Berkeley. What date was that or what year?

5 A. That was 2009.

6 Q. And then you got an MS in electrical from
7 Ohio University. What year was that?

8 A. 2020.

9 Q. And what have been your various jobs at
10 BEAR? Understanding you're currently an engineer;
11 what did you start out as?

12 A. Engineer.

13 Q. Okay. So you've had the same job title
14 since you started in 2009?

15 A. Yes.

16 Q. When did you start doing expert witness
17 work to the extent that you were the named expert by
18 parties?

19 A. That would be maybe -- maybe around 2020.

20 Q. Okay. And prior to 2020, would you have
21 been more in the assistive-type role?

22 A. Yes.

23 Q. When you got your electrical engineering
24 degree from Ohio University, did you go back to --
25 or did you go to Ohio for a couple of years in

Derek A. King, M.S., P.E.
08/19/2024

Page 71

1 phonetically. Is -- actually, I'm not even going to
2 try to say it.

3 The battery manufacturer is listed on the
4 first page of Exhibit 74, correct?

5 A. Yes.

6 Q. And you don't know whether that's the
7 same battery manufacturer for the lithium-ion
8 battery cell that was involved in the Rogue model,
9 correct?

10 A. Correct.

11 Q. And you did not do anything to assess
12 that issue?

13 A. Correct.

14 Q. All right. Going to page 8.

15 A. Of which?

16 Q. Oh, I'm sorry. Of your PowerPoint, which
17 is Exhibit 72. All right.

18 Looking at page 8 of Exhibit 72, this is
19 what appears to be just a comparison from the
20 exemplar compared to the subject unit, correct?

21 A. Yes.

22 Q. And then if we go to page 9 of your
23 PowerPoint, this is when you remove the exemplar
24 battery pack, correct?

25 A. Yes.

Derek A. King, M.S., P.E.
08/19/2024

Page 90

1 A. Approximately, yeah.

2 BY MR. LAFLAMME:

3 Q. So in order to get the cells 4 and 10 to
4 short circuit, both of their separators would have
5 had to fail at approximately the same time, correct?

6 A. Yes.

7 Q. Have you ever had any other hoverboard
8 cases where you believe there was a short circuit in
9 two different cells at approximately the same time?

10 A. I have not personally had any other
11 hoverboard cases.

12 Q. Okay. How about any other lithium-ion
13 battery cases, any others that you can identify
14 where you believe the -- two of -- at least two of
15 the battery cells within the battery pack failed at
16 approximately the same time due to a short circuit?

17 A. Not -- nothing comes to mind.

18 Q. Okay. If you could pull out your
19 PowerPoint again, and go to the page of the CT scan.

20 Were you able to -- was there any arcing
21 that was found on any wires within the hoverboard?

22 A. Not that I observed.

23 Q. Was there any arcing -- or are you aware
24 of any arcing that was found on any wires related to
25 the Wadsworth house at the site?

Derek A. King, M.S., P.E.
08/19/2024

Page 91

1 A. I thought someone mentioned a possible
2 arc outside. I'm not certain that --

3 Q. So you are aware that there has at least
4 been some discussions about some arcing that may
5 have been found on some wires outside of the
6 residence?

7 A. Yes, at least some discussion of that
8 possibility.

9 Q. Do you know where that arcing was
10 located?

11 A. Somewhere related to the shed, the
12 smoking shed.

13 Q. So you are aware at least of at least
14 some discussion about some arcing that was
15 identified at the smoking shed outside of the
16 residence, correct?

17 A. Yes.

18 Q. Are you aware of any arcing that was
19 identified inside the residence, the internal house
20 wiring?

21 A. No, I'm not.

22 Q. And this hoverboard was located just in
23 front of an electrical outlet, correct?

24 A. I believe so, yes.

25 Q. And you're not aware of any arcing that

Derek A. King, M.S., P.E.
08/19/2024

Page 167

1 Q. I think you answered it.

2 You were asked questions and shown a few
3 of the CT images of the internal tabs within the
4 battery cells.

5 Do you remember that?

6 A. Yes.

7 Q. And you were asked questions about
8 whether or not you would expect them to be -- to
9 have some destruction if, in fact, there was a short
10 circuit internally.

11 Do you remember that?

12 A. Yes. Yeah, I remember.

13 Q. Is there -- is it possible for the tabs
14 within the battery cells to remain intact even in
15 the occurrence of a short circuit?

16 A. Yes. And I think this is a good example
17 of that.

18 You know, to me it's clear that the
19 batteries, these two batteries -- cells exploded,
20 because the top caps are gone, the contents are
21 ejected and gone. The crimp that holds the top cap
22 is opened. So I don't think there's any reason to
23 doubt that the battery exploded open with internal
24 pressure.

25 The fact that the negative tabs appear to

Derek A. King, M.S., P.E.
08/19/2024

Page 169

1 necessarily follow that the internal tabs will be
2 destroyed. Is that fair?

3 A. That's fair. That's my interpretation of
4 this evidence.

5 Q. Is that consistent, at the very least,
6 with what you've learned and possibly even seen over
7 the course of your career with the various
8 lithium-ion research and inspections and
9 investigations that you've done?

10 A. Yes. We -- we've seen negative tabs in a
11 variety of conditions. Yeah, I don't recall the
12 whole range of conditions offhand.

13 Q. Okay. But at the very least, there was
14 some in conditions similar to what you've seen in
15 this case? Is that fair?

16 A. Yes.

17 Q. You were not involved in the removal of
18 the hoverboard from its original location at the
19 home, correct?

20 A. Correct.

21 Q. Whoever was involved in the removal of
22 that -- of the hoverboard from its original location
23 and its original condition, you've not spoken with
24 them?

25 A. Correct.

Derek A. King, M.S., P.E.
08/19/2024

Page 171

1 Do you remember that?

2 A. Yes, I think so.

3 Q. And you were asked that question in
4 conjunction with whether -- you know, what
5 depositions and deposition testimony you had
6 reviewed or had not reviewed.

7 Do you remember that?

8 A. Yes.

9 Q. You did review the Sweetwater County
10 Sheriff's Office Public Investigative Report,
11 however, correct?

12 A. Yes, I did.

13 Q. And in that report, on what appears to be
14 page 8 of 15 of that report, it talks about
15 Detective Sheaman's involvement in his
16 investigation.

17 And a little bit south of halfway through
18 the page, the paragraph begins with, "While
19 observing."

20 A. Yes.

21 Q. Okay. It says: While observing
22 electrical wiring and components in the bedroom and
23 closet, Detective Sheaman found nothing suspicious.
24 However, Detective Sheaman did notice an outlet that
25 showed that something had been inserted into the

Derek A. King, M.S., P.E.
08/19/2024

Page 172

1 lower plug. There was melted plastic covering the
2 lower plug holes and were -- and wires were coming
3 out of the melted plastic. This showed that
4 something may have been plugged into the outlet,
5 maybe a charger.

6 Do you see that?

7 A. Yes.

8 Q. Is that, at the very least, one piece of
9 evidence that you relied upon in the totality of all
10 the other evidence, but at least one piece that you
11 relied upon for your assumption that this hoverboard
12 was plugged in at the time of incident?

13 A. Yes, this was a part of it.

14 Q. You mentioned you had not reviewed the
15 children's deposition testimonies yet, correct?

16 A. Correct.

17 Q. Is that something you anticipate looking
18 at?

19 A. I think I will.

20 Q. Okay. If there's anything that -- after
21 your review of those depositions, that changes your
22 opinions at all, will you let me know?

23 A. Of course.

24 Q. Same thing as to Detective Sheaman's. If
25 there's anything that you review that affects,

Derek A. King, M.S., P.E.
08/19/2024

Page 176

1 MR. LAFLAMME: Object to form.

2 A. Correct.

3 BY MR. AYALA:

4 Q. And your conclusion based upon what you
5 were provided, or really not provided, was that
6 proper FMEA had not been not been conducted?

7 MR. LAFLAMME: Object to form.

8 A. That's correct.

9 BY MR. AYALA:

10 Q. And based upon that conclusion, the Court
11 did not allow your opinion?

12 MR. LAFLAMME: Object to form.

13 A. It's not clear to me on what basis the
14 Court did not allow that opinion.

15 BY MR. AYALA:

16 Q. The opinions that you're offering in this
17 case, would it be fair to say they're based upon
18 certainly your inspection of this hoverboard?

19 A. Yes.

20 Q. And its components?

21 A. Yes.

22 Q. As well as the pictures provided to you
23 relating to this case?

24 A. Yes.

25 Q. As well as your background, your

Derek A. King, M.S., P.E.
08/19/2024

Page 177

1 training, your experience?

2 A. Yes.

3 Q. As well as any additional information
4 such as investigative reports and certainly the
5 depositions that you have in your possession?

6 A. Yes, generally. To the degree that I've
7 read those.

8 Q. And any research or literature that
9 you've reviewed over the years relating specifically
10 to these issues we're talking about today with
11 lithium-ion batteries?

12 A. Yes.

13 Q. Based upon your inspection and the
14 totality of your investigation in this case, can you
15 conclude, more likely than not, within a reasonable
16 degree of engineering probability, that the fire
17 that we're here to talk about today originated as a
18 result of a malfunction or a defect in this battery
19 cell within the battery pack of the Wadsworth
20 hoverboard?

21 MR. LAFLAMME: Object to form.

22 A. Yes. So overall, I think that's the most
23 likely based on -- you know, considering if a fire
24 did reach the board and consumed the board, I would
25 expect the other cells in the pack to have also

Derek A. King, M.S., P.E.
08/19/2024

Page 178

1 exploded, if explosions were the result of external
2 heating.

3 BY MR. AYALA:

4 Q. Let me see if I understood what you just
5 said.

6 If the explosion of this hoverboard was
7 due to an external heating origin, you would have
8 expected the remainder of those battery cells to
9 have further exploded?

10 A. Yes.

11 Q. The fact that cells 4 and 10 were the
12 only ones that exploded, does that lead you to
13 believe that it was directly related to an internal
14 short in those cells?

15 MR. LAFLAMME: Object to form.

16 A. More likely than not, yes.

17 BY MR. AYALA:

18 Q. Okay. The direction in which those cells
19 ruptured or exploded, does that any in way, shape,
20 or form, affect the possibility of the other battery
21 cells exploding?

22 MR. LAFLAMME: Object to form.

23 A. No. No, I don't believe it does.

24 BY MR. AYALA:

25 Q. Okay. In the case of an internal short,

Derek A. King, M.S., P.E.
08/19/2024

Page 179

1 is it possible for isolated battery cells to explode
2 and not the entirety of the pack?

3 A. That's -- that is the expected behavior,
4 is that an isolated battery would -- that
5 experiences an internal short would -- only itself
6 would explode. It's not impossible that it could
7 cause a chain reaction, but I don't think that's --
8 that's not typical that I've seen.

9 Q. Okay. And then is it -- is it more
10 likely that when the short occurs, as in this case,
11 in two cells that are isolated, that that, then,
12 could lead to the fire -- the flames as you, I
13 believe, described it earlier, an explosion?

14 MR. LAFLAMME: Object to form.

15 A. Right. So yes, internal shorting can
16 lead to flames and explosions.

17 BY MR. AYALA:

18 Q. Without the other cells exploding?

19 A. Right, without -- without sufficient heat
20 going into the adjacent cells and triggering
21 explosions there, right.

22 Q. Okay. You were asked early in your
23 deposition, as we looked at Exhibit 73, about the
24 possibility of the fire starting outside of the
25 boys' bedroom window.

Derek A. King, M.S., P.E.
08/19/2024

Page 187

1 A. Ranges from one to -- one or two is the
2 most common.

3 Q. What's the UL standard applicable to
4 e-cigarettes?

5 A. I don't recall the number.

6 Q. It's not UL 2272, is it?

7 A. No.

8 Q. So aside from the e-cigarette cases in
9 which you have assisted others, we're aware of the
10 one other hoverboard in which -- case in which you
11 assisted one of your co-workers, correct?

12 A. Yes.

13 Q. And then this case, correct?

14 A. Correct.

15 Q. Does that run the full list?

16 MR. AYALA: Form.

17 BY MR. LAFLAMME:

18 Q. Does that run the full list of
19 lithium-ion battery fire cases that you have worked
20 on?

21 A. There were some e-bike, electric bike.

22 Q. Were there e-bike fires?

23 A. Yes.

24 Q. Okay. How many of those have you worked
25 on?

Derek A. King, M.S., P.E.
08/19/2024

Page 188

1 A. One, I remember distinctly, but I believe
2 there may have been one or two more.

3 Q. You were not the primary expert on
4 either -- any of those, were you?

5 A. Correct.

6 Q. You have never authored a report related
7 to an e-bike fire case, have you?

8 A. Correct.

9 Q. You have not provided any testimony
10 related to an e-bike fire case, correct?

11 A. Correct.

12 Q. You were merely an assistant to someone
13 else on those e-bike fire cases, correct?

14 MR. AYALA: Form.

15 A. Correct.

16 BY MR. LAFLAMME:

17 Q. And, in fact, you weren't even a
18 professional engineer until last year, correct?

19 A. Correct.

20 Q. Have we now exhausted the list of all of
21 the lithium-ion battery fire cases that you've
22 worked on?

23 A. I believe so.

24 Q. So the only one in which you have
25 actually authored a report related to an alleged

Derek A. King, M.S., P.E.
08/19/2024

Page 203

1 review of evidence, especially what I have seen
2 firsthand.

3 BY MR. AYALA:

4 Q. What opposing counsel didn't tell you is
5 that she also testified that the space heater in
6 that shed was off.

7 Did you know that?

8 A. No, I didn't -- I wasn't aware of the
9 state of the heater.

10 Q. And that any cigarette that she smoked
11 was off. Did you know that?

12 A. I wasn't aware either way if she was
13 smoking.

14 Q. Despite seeing some additional documents
15 that you were shown today and have been attached to
16 your deposition, did any of those documents in any
17 way, shape, or form, change your analysis or your
18 conclusions in this case?

19 A. So far, no. I mean, we talked earlier,
20 that achieving UL approval for a given standard
21 isn't a guarantee of -- isn't a guarantee of safety.
22 It's certainly good to do, but it's not a guarantee.
23 And despite the certification, I still have the --
24 you know, my review of the evidence.

25 Q. And we know it's not a guarantee, because

Derek A. King, M.S., P.E.
08/19/2024

Page 204

1 as opposing counsel established, Jetson itself
2 recalled their Rogue models that were UL 2272 and
3 2580 certified, right?

4 A. Yes.

5 Q. And by the way, you were asked about the
6 external fire attack and this -- as they like to
7 paint it, this phenomena that two cells, almost
8 simultaneously, short-circuited and how rare that
9 might be.

10 If this hoverboard was attacked by fire,
11 wouldn't it be equally as rare that only cells 4 and
12 10 exploded?

13 MR. LAFLAMME: Object to form.

14 A. Right. If these cells are susceptible to
15 explosion due to external heating, then I would
16 expect more -- most of the cells that were also
17 exposed to fire to also explode.

18 BY MR. AYALA:

19 Q. And so what makes the most sense is that
20 within those individual cells, 4 and 10, that they
21 had specific issues, individually, which caused them
22 to malfunction; i.e., explode?

23 MR. LAFLAMME: Object to form.

24 A. So that's -- that's the conclusion I
25 reached for saying it's more likely that the cells